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Remarks

Applicants thank Examiner Le for allowing Claim 120 and for indicating the allowability of Claims 3, 9, 14, 22, 23, 26, 33, 37, 41-43, 46, 59, 60, 67, 71, 74, 80, 81, 102 and 114. Claims 3, 9, 14, 22, 26, 33, 37, 42, 46, 59, 67, 71, 74, 102 and 114 have been rewritten in independent form, including all of the limitations of any base claim(s). Thus, Claims 3, 9, 14, 22, 23, 26, 33, 37, 41-43, 46, 59, 60, 67, 71, 74, 80, 81, 102 and 114 (and Claims 23, 41, 43, 60, 80, 81 and 115 that depend directly or indirectly therefrom) are in condition for allowance.

However, the finality of the Office Action dated May 9, 2005 is clearly premature. In the previous Office Action dated December 13, 2004, the Examiner allowed Claims 24-43 and 65-96, and indicated the allowability of Claims 2-11, 14, 18, 22, 23, 45-50, 52, 55, 59, 60, 63 and 64. All of the claims rejected in the Office Action dated December 13, 2004 were rewritten in independent form (Claims 18 and 63), amended directly or indirectly to include subject matter indicated as being allowable (e.g., the essential limitations of Claim 2 were incorporated into Claim 1, the only difference being that the term "resistors" in original Claim 2 read —resistances— in amended Claim 1) or believed to be allowable (Claims 120-121), or amended to depend directly or indirectly from an allowable claim (Claims 2-5, 7, 14-16, 46-48, 59, and 97-119). At the time of their introduction on February 25, 2005, Claims 1-44, 46-51, 53-54 and 56-119 depended directly or indirectly from amended — and allowable — Claims 1, 18 or 63.

Most tellingly, *Claims 24-25, 27-32, 34-36, 38-40, 65-66, 68-70, 72, 73, and 75-96 were allowed in the first Office Action dated December 13, 2004, they have not been amended (except for Claim 89, amended for the first time in the present Amendment), and yet they stand finally rejected in the second Office Action dated May 9, 2005.* Thus, the Examiner has issued a new ground of rejection for these claims that was not necessitated by any amendment. Furthermore, Applicants have not filed any Information Disclosure Statements since the present application was filed on June 26, 2003. Thus, the new ground of rejection for these claims could not have been necessitated by an Information Disclosure Statement filed during the period set forth in 37 C.F.R. 1.97(e). As a result, the final rejection of these claims in the second Office

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Action dated May 9, 2005 is improper. M.P.E.P. § 706.07(a). **Withdrawal of the finality of the final rejection in the second Office Action dated May 9, 2005 is respectfully requested.**

The Rejection of Claims 1, 12-13, 24-25, 27-32, 34-36, 38, 44, 47-51, 53, 56-58, 61-66, 68-70, 72-73, 75, 78, 82-86, 88-98, 111-113, 116-117 and 121 under 35 U.S.C. § 102(a) is Respectfully Traversed

The rejection of Claims 1, 12-13, 24-25, 27-32, 34-36, 38, 44, 47-51, 53, 56-58, 61-66, 68-70, 72-73, 75, 78, 82-86, 88-98, 111-113, 116-117 and 121 under 35 U.S.C. § 102(a) as being anticipated by Applicants' FIGS. 1-2 is respectfully traversed.

First and foremost, neither Applicants nor Applicants' representatives have, at any time, stated, indicated, admitted, or otherwise suggested that FIGS. 1-2 of the present application are prior art available against the present claims under any section of 35 U.S.C. § 102 et seq. Applicants' undersigned representative strongly objects to any characterization of Applicants' FIGS. 1-2 as an admission of prior art by Applicant. Such use of Applicants' disclosure against him in prosecution discourages full and complete disclosure of all relevant information to the U.S. Patent and Trademark Office (USPTO), thus appearing to violate the USPTO's regulations and long-standing policy encouraging such disclosure (see, e.g., 37 C.F.R. §§ 1.56, 1.98 and 1.99, M.P.E.P. §§ 609 and 706.02(c), and particularly M.P.E.P. § 2129, which appears to require a statement "identifying the work of another as 'prior art'" in order to constitute an admission that the work is available as prior art against the claims"). There is no such statement in either Applicants' FIGS. 1-2 or the present application, and there has been no such admission during prosecution.

If such information is actually prior art available against the pending claims, then a reference or other publication available under 35 U.S.C. § 102 and disclosing the same should be located and properly cited. Alternatively, the Examiner can take official notice that Applicants'

* Mere inclusion in the background section of an application does not appear to be sufficient. Applicants' undersigned representative is not aware of any statutory, regulatory or policy basis for presuming or concluding that any disclosure in the background section of an application is an admission that such disclosure constitutes prior art available against the claims.

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FIGS. 1-2 are commonly known in the art (or, perhaps, that somehow Applicants have admitted that their FIGS. 1-2 are available as prior art) and rely on a self-executed Affidavit attesting to his personal knowledge of facts establishing such technology as prior art available under 35 U.S.C. § 102 against the claims:

"If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding." M.P.E.P. § 2144.03, citing 37 C.F.R. 1.104(d)(2).

Applicants have traversed all effective assertions of official notice that Applicants' FIGS. 1-2 are admitted prior art or are otherwise available as prior art. Consequently, any successive Office Action must provide documentary evidence if the rejection is to be maintained. See M.P.E.P. § 2144.03; see also *In re Zurko*, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test).

However, instead of rejecting the claims on a proper basis formed from facts established through available prior art, Applicants' disclosure has been used against them in a manner defeating a primary purpose of the U.S. patent system (full and complete disclosure of the invention) and effectively punishing Applicants for complying with his duty to disclose all relevant and/or material information known to those associated therewith.^b

Nonetheless, Applicants' FIGS. 1-2 show technology generally considered to be conventional. As such, Applicants do not intend to claim subject matter disclosed only in FIGS. 1-2 of the present application. The present invention represents an improvement over the subject matter disclosed only in FIGS. 1-2 of the present application.

That being said, assuming for the sake of argument that the technology shown in Applicants' FIGS. 1-2 is available as prior art against the present claims, FIGS. 1-2 of the present application neither disclose nor suggest an overvoltage protection circuit in

^b See, e.g., the Patent Act of 1790, ch. 7, §§ 2 and 6, 1 Stat. 109 (in part, making it a defense to a suit for infringement that the specification "does not contain the whole of the truth concerning (the) invention"); see also *Chilsum on Patents*, §§ 11.03[4] and 19.03.

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communication with a common mode circuit, wherein at least part of the common mode circuit is electrically interposed between the overvoltage protection circuit and a differential signal transmission line, as recited in Claims 1 and 63 (and claims dependent therefrom). Similarly, Applicants' FIGS. 1-2 neither disclose nor suggest a means for protecting circuitry from an overvoltage, wherein at least part of a means for reducing a swing of a differential signal transferring means is electrically interposed between the means for protecting and the differential signal transferring means, as recited in Claim 24 (and claims dependent therefrom). Furthermore, Applicants' FIGS. 1-2 neither disclose nor suggest the step of shunting an overvoltage to a low impedance node through a termination circuit, as recited in Claim 86 (and claims dependent therefrom). Finally, Applicants' FIGS. 1-2 neither disclose nor suggest first and second overvoltage protection circuits coupled to separate nodes in a voltage divider, as recited in Claim 121. Thus, assuming for the sake of argument that the technology disclosed in Applicants' FIGS. 1-2 is available as prior art against the present claims, Applicants' FIGS. 1-2 are saliently deficient with respect to the present claims.

First, Applicants' FIG. 1 does not disclose an overvoltage protection circuit or means for protecting circuitry from an overvoltage. Thus, Applicants' FIG. 1 cannot anticipate any claim that recites an overvoltage protection circuit or means for protecting circuitry from an overvoltage (Claims 1, 3-14, 17, 19-44, 46-51, 53-54, 56-85, 97-98, 102-104, and 111-121). Similarly, because Applicants' FIG. 1 does not disclose an overvoltage protection circuit or means for protecting circuitry from an overvoltage, Applicants' FIG. 1 cannot anticipate any claim that recites a method of protecting a differential circuit from an overvoltage that includes shunting the overvoltage to a low impedance node through a termination circuit (Claims 86-96). Thus, Applicants' FIG. 1 does not anticipate any of the present claims.

Second, Applicants' FIG. 2 does not disclose a circuit comprising a differential signal transmission line, a common mode circuit and at least one overvoltage protection circuit, where at least part of the common mode circuit is electrically interposed between the overvoltage protection circuit and the differential signal transmission line. In Applicants' FIG. 2, no part of the common mode circuit is electrically interposed between an overvoltage protection circuit and

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the differential signal transmission line. At best, an output of the common mode circuit meets an input of an overvoltage protection circuit at a node shared with or including a differential signal transmission line. Thus, Applicants' FIG. 2 does not anticipate any claim that recites a circuit where at least part of the common mode circuit is electrically interposed between the overvoltage protection circuit and the differential signal transmission line (Claims 1, 3-14, 17, 19-23, 44-51, 53-54, 56-64, 97-98, 102-104, and 111-119).

However, instead of particularly pointing out the part of the common mode circuit in Applicants' FIG. 2 that is electrically interposed between the overvoltage protection circuit and the differential signal transmission line, or otherwise explaining where such an arrangement can be found in Applicants' FIG. 2, the claim language has merely been repeated in the Office Action, and the unsupported assertion made that Applicants' FIGS. 1-2 disclose it. The unsupported assertion that the claimed elements are present in FIGS 1-2 is legally insufficient:

[37 C.F.R.] § 1.104 Nature of examination.

(c) Rejection of claims.

- (1) If the invention is not considered patentable, or not considered patentable as claimed, the claims, or those considered unpatentable will be rejected.
- (2) In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, *the particular part relied on must be designated* as nearly as practicable. *The pertinence of each reference*, if not apparent, *must be clearly explained* and each rejected claim specified.

If it is believed that Applicants' FIGS. 1-2 disclose a common mode circuit, at least part of which is electrically interposed between an overvoltage protection circuit and a differential signal transmission line, the Examiner is invited to designate that particular part of Applicants' FIGS. 1-2 on which reliance is placed for such disclosure. In the absence of such designation, Applicants respectfully request withdrawal of this ground of rejection.

Similarly, Applicants' FIG. 2 does not disclose a circuit comprising a means for transferring a differential signal, a means for reducing a swing of the means for transferring, and

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at least one means for protecting circuitry from an overvoltage, where at least part of the means for reducing is electrically interposed between the means for protecting and the means for transferring. Thus, consistent with the explanation provided immediately above, Applicants' FIG. 2 cannot anticipate any claim that recites an arrangement where at least part of the means for reducing is electrically interposed between the means for protecting and the means for transferring (Claims 24-43 and 65-85). Again, the Examiner is invited to designate that particular part of Applicants' FIGS. 1-2 on which reliance is placed for disclosure of such a circuit arrangement. In the absence of such designation, Applicants respectfully request withdrawal of this ground of rejection.

Furthermore, Applicants' FIG. 2 does not disclose first and second overvoltage protection circuits coupled to nodes in a voltage divider (Claim 121). In Applicants' FIG. 2, the overvoltage protection devices are coupled to the differential signal transmission line and/or to nodes external to the voltage divider, not in the voltage divider. Thus, Applicants' FIG. 2 does not anticipate Claim 121, which recites first and second overvoltage protection circuits coupled to nodes in a voltage divider. Again, the Examiner is invited to designate that particular part of Applicants' FIGS. 1-2 on which reliance is placed for disclosure of such a circuit arrangement. In the absence of such designation, Applicants respectfully request withdrawal of this ground of rejection.

Finally, Applicants' FIG. 2 does not disclose a circuit capable of performing a method of protecting a differential circuit from an overvoltage that includes the step of shunting an overvoltage to a low impedance node through a termination circuit. Thus, consistent with the explanation provided above, Applicants' FIG. 2 cannot anticipate any claim that recites such a shunting step (Claims 86-96). Again, the Examiner is invited to designate that particular part of Applicants' FIGS. 1-2 on which reliance is placed for disclosure of such a method step. In the absence of such designation, Applicants respectfully request withdrawal of this ground of rejection.

Thus, Applicants' FIGS. 1-2 do not anticipate any of the present claims. If such a belief still exists after careful review of the present Amendment, an explanation of that belief, both in

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law (e.g., what is the basis for Applicants' "admission"?), and in fact (e.g., what part of Applicants' FIGS. 1-2 discloses a common mode circuit, at least part of which is electrically interposed between an overvoltage protection circuit and a differential signal transmission line?), is respectfully requested. If such an explanation is forthcoming, given the premature finality of the Office Action dated May 9, 2005, Applicants respectfully request that the explanation be provided in a non-final Office Action.

Given that Applicants' FIGS. 1-2 does not anticipate any of the present independent claims, no need is seen to provide independent arguments in support of particular dependent claims. However, Applicants' undersigned representative notes that there is no explicit disclosure in Applicants' FIGS. 1-2 that:

- The differential amplifier 12 is a low voltage differential amplifier (Claims 53, 75, 97, 98, 116, and 117);
- The first and second resistors each have a resistance less than a resistance component of an impedance of a means for buffering (Claims 28, 38, 47, 68 and 112);
- The circuitry therein is part of a receiver or transmitter (Claims 61-66 and 82-85);
or
- The circuitry therein is capable of performing any of the additional method steps or meeting any additional elements recited in Claims 87-89.

Thus, Applicants preserve their right to argue these claims independently at a later time, should it be appropriate and/or desirable to do so.

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The Rejection of Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 87, 99-110 and 118
under 35 U.S.C. § 103(a) is Respectfully Traversed

The rejection of Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 87, 99-110 and 118 under 35 U.S.C. § 103(a) as being unpatentable over Applicants' FIGS. 1-2 in view of Jenkins et al. is respectfully traversed.

First, Applicants' FIGS. 1-2 do not disclose a diode. Thus, Applicants' FIGS. 1-2 are saliently deficient with regard to any claim that recites a diode or an overvoltage protection circuit (comprising a diode) in communication with a common mode circuit, where at least part of the common mode circuit is electrically interposed between the diode (or overvoltage protection circuit) and the differential signal transmission line (Claims 2, 14-19, 39, 40, 54, 76-77, 87, 89, 102 and 118-119).

In the Office Action dated December 13, 2004, an indication was given that the present claims (except for Claims 120-121) were allowable over the prior art, including Jenkins et al. Thus, it is not clear what deficiencies of Applicants' FIGS. 1-2 with regard to the present Claims 1, 18, 24, and 86 (from which Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 87, 99-110 and 118 depend, directly or indirectly) as explained above can be cured by Jenkins et al.

Without question, Jenkins et al. does not disclose a diode or an overvoltage protection circuit (comprising a diode) in communication with a common mode circuit, where at least part of the common mode circuit is electrically interposed between the diode (or overvoltage protection circuit) and the differential signal transmission line. Jenkins et al. merely discloses one or more overvoltage protection circuits (comprising one or more diodes) directly connected to a differential signal transmission line. The discussion of common mode input voltages in Jenkins et al. refers to differential inputs or a buffer upstream from the overvoltage protection circuit (see, e.g., col. 2, l. 59-col. 3, l. 5). Thus, Jenkins et al. cannot cure the deficiencies of Applicants' FIGS. 1-2 with regard to the present Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 99-110 and 118, nor can Jenkins et al. provide motivation to modify Applicants' FIGS. 1-2 in the manner necessary to arrive at the present Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 99-110 and 118. As a result, no combination of Applicants' FIGS. 1-2 and Jenkins et al. can render the

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present Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 99-110 and 118 unpatentable, and the rejection of these claims would appear to be based on impermissible hindsight reconstruction.

Furthermore, Jenkins et al. does not disclose a circuit capable of shunting an overvoltage to a low impedance node through a termination circuit (Claim 87). As explained immediately above, Jenkins et al. directly connects one or more overvoltage protection circuits to a differential signal transmission line. An overvoltage cannot be shunted through any other circuit in the disclosure of Jenkins et al. Thus, Jenkins et al. cannot cure the deficiency of Applicants' FIGS. 1-2 with regard to the present Claim 87, nor can Jenkins et al. provide motivation to modify Applicants' FIGS. 1-2 in the manner necessary to arrive at the present Claim 87. As a result, no combination of Applicants' FIGS. 1-2 and Jenkins et al. can render the present Claim 87 unpatentable, and the rejection of Claim 87 would also appear to be based on impermissible hindsight reconstruction.

Consequently, this ground of rejection is unsustainable, and should be withdrawn.

Given that no possible combination of Applicants' FIGS. 1-2 and Jenkins et al. discloses or suggests any of the present claims, no need is seen to provide independent arguments in support of particular dependent claims. However, Applicants' undersigned representative wishes to reserve the right to argue for particular dependent claims independently at a later time, should it be appropriate and/or desirable to do so.

Furthermore, as stated above, a number of claims rejected for the first time under 35 U.S.C. § 103(a) in the Office Action dated May 9, 2005 were considered allowable in the Office Action dated December 13, 2004, and have not been amended at any time (e.g., Claims 39, 76 and 87). Claims 17, 19-21 and 54 were amended only to the extent that a base claim from which they depend was amended to include subject matter indicated as allowable in the Office Action dated December 13, 2004. Thus, if any part of the present rejection under 35 U.S.C. § 103(a) is maintained, the particular basis for such rejection (at least as requested above with regard to the present rejection under 35 U.S.C. § 102(a)) should be issued in a non-final Office Action.

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Conclusions

Applicants and their representatives again wish to thank Examiner Le for allowing Claim 120, and for indicating the allowability of Claims 3, 9, 14, 22, 23, 26, 33, 37, 41-43, 46, 59, 60, 67, 71, 74, 80, 81, 102 and 114. Claims 3, 9, 14, 22, 26, 33, 37, 42, 46, 59, 67, 71, 74, 102 and 114 have been rewritten in independent form, including all of the limitations of any base claim(s). Thus, Claims 3, 9, 14, 22, 23, 26, 33, 37, 41-43, 46, 59, 60, 67, 71, 74, 80, 81, 102 and 114 (and Claims 23, 41, 43, 60, 80, 81 and 115 that depend directly or indirectly therefrom) are in condition for allowance.

Furthermore, the rejections of the remaining claims under 35 U.S.C. § 102(a) and 35 U.S.C. § 103(a) are clearly premature, inadequately explained and/or supported, and erroneous. Withdrawal of the rejections of Claims 1, 12-13, 24-25, 27-32, 34-36, 38, 44, 47-51, 53, 56-58, 61-66, 68-70, 72-73, 75, 78, 82-86, 88-98, 111-113, 116-117 and 121 under 35 U.S.C. § 102(a) and of Claims 2, 5-8, 10-11, 15-21, 39, 54, 76, 87, 99-110 and 118 under 35 U.S.C. § 103(a) is respectfully requested.

In view of the above amendments and remarks, all bases for rejection are overcome, and the application is in condition for allowance. Early notice to that effect is earnestly requested.

Respectfully submitted,



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